2002 Deer Hunter Survey
Summary Statistics

August 2002 – January 2003
Hunting Season

(This report includes Unit 4 harvest data from January and doe harvest data from Prince of Wales Island in the survey even though those are federal hunting seasons.)

INTRODUCTION, METHODS, AND ANALYSIS

The annual deer hunter harvest mail survey was conducted by the Alaska Department of Fish and Game, Division of Wildlife Conservation to estimate the harvest of Sitka black-tailed deer and hunter effort in Southeast Alaska. The survey was mailed to a sample of hunters who obtained deer harvest tickets in Region I (Southeast Alaska) during the 2002-03 deer hunting season. Results of the survey contribute to management decisions and recommendations made by Region I wildlife biologists to the Alaska Board of Game. They are also used by the U.S. Forest Service to help determine how logging and other land management decisions affect deer populations and hunting. This information is also used by the Federal Regional Advisory Council and Federal Subsistence Board when evaluating federal subsistence hunting regulations.

Form – As in recent years, the survey asked hunters to be specific in describing the locations (islands, bays, shore and/or drainages) where they hunted deer. Hunters were also asked if they participated in the state proxy or federal designated hunter programs and the number of deer they harvested for others under those programs.

Distribution –Approximately 33% of the deer hunters hunting in Southeast Alaska who obtained deer harvest tickets were sent surveys. Sampling is stratified random based on community. According to information supplied by license vendors, 6,891 hunters obtained deer harvest tickets in 2002, about 100 fewer than in 2001.

Response – The overall response rate of those who received surveys was 56%, which was the lowest response rate since 1996. Because response rates varied by community, the responses received from each community were multiplied by an expansion factor to calculate estimates for all hunters possessing deer harvest tickets in the community. The higher the sample fraction and percentage of responses from a community, the lower the expansion factor. The higher a community's response rate, the more likely the data represent actual hunting effort and success of all deer hunters with in that community.

Kill location – The percentage of hunters who described kill location specifically enough to be assigned to a Game Management Unit (GMU), island, major hunt area, or Wildlife Analysis Area (WAA) was 99.9%. When kill location was not identified specifically enough to be assigned to a GMU, island, major hunt area, or WAA, they are report as unknown or missing in the summary. In the past (prior to 1996), when hunters were provided a map to code hunt locations, 99% of responding hunters reported hunt locations down to the scale of WAA. In the 2002 survey, without a map, the percentage of hunters that gave detailed enough information to code hunt locations to GMUs was slightly higher than last year. For GMUs the percentage was 99.9%, for islands it was 99.1%. The percentage giving enough detail to code to major hunt area increased slightly to 98.6%. The percentage of those providing sufficient information for coding to WAAs increased very slightly from the previous year to 96.3% in 2002.

Results

Harvest –This year's survey results are notable in that the reported region-wide harvest is the lowest in 20 years, and reported number of hunters is the lowest in 11 years, with both totals being the third lowest since the survey began in 1980. Total deer harvest for the 2002 season is estimated to be 8,574, a decrease of about 3,420 (28%) from the previous season and 3,840 (27%) less than the average for the previous 20 years. Hunter numbers of 6,891 were 9% lower than last year and lower than the long-term average of 8,038. Fewer hunters reported success in 2002 than in either of the two previous hunting seasons. The hunter success rate was 58%, six percent lower than the long-term average. The average hunter spent 5.4 days hunting this year, approximately the same amount as last year, and more than half a day less than the long-term average of 6 days. On average, hunters bagged a deer every 4.3 days afield, a slower rate than the long-term average of 4.0 days per deer. The total number of hunter days afield (37,048) decreased over last years hunting season and remains 22% below the long-term average. This is the lowest level of hunter effort since 1980. The average number of deer killed per hunter was 1.2, down from last year and below the long-term average of 1.5.

Regionwide, 36% of the deer harvest was taken by hunters using highway vehicles or ATVs as their primary means of transportation to and from hunting areas. That is up from the 34% using motorized road vehicles in 2001 and close to the percentages using vehicles in 1999 and 1998. The percentage of deer harvested by boat hunters decreased slightly to 54% from 57% in 2001 and is close to the 53% and 58% in 1999 and 1998, respectively. Hunters using airplanes took 6% of the deer in 2002, a slightly lower percentage than the previous 3 years.

Proxy and designated hunters – Fewer hunters reported being state proxy or federal designated hunters than in 2001 and they reported taking almost 40% fewer deer, although overall success rate was higher. An estimated 110 state proxy hunters from 7 communities took a total of 231 deer with a 77% success rate in 2002. That compares to 228 hunters, 332 deer and a 54% success rate in 2001. In 2002, proxy hunters resided in Angoon, Hoonah, Juneau, Ketchikan, Petersburg, Sitka, and Wrangell.

Fewer hunters reported as federal designated hunters in 2002 than in 2001 although their reported success rate was slightly higher. An estimated 126 federal designated hunters from 8 communities took 219 deer with a 68% success rate in 2002. That compares with 242 hunters from 12 communities reporting 425 deer and a 65% success rate in 2001. Designated hunters reporting in 2002 resided in Craig, Hoonah, Juneau, Kake, Petersburg, Sitka, Thorne Bay, and Wrangell.

Weather: The winter of 2002-03 had relatively mild temperatures and record low snowfall. Pellet-group surveys completed after the hunting season in spring 2003 found deer densities slightly higher in northern Southeast Alaska, showing continued evidence of rebounding from the effects of the severe winter of 1998-99. All pellet-group densities on Prince of Wales Island in southern Southeast were lower than the previous year. Densities on Mitkof Island were down sharply from 2001, the lowest reported in 18 years of survey work. Also, there is a parallel between the weather during the 2002 season and that of 1996, which is the closest comparable low harvest year from the ABC islands. That year also had very little snow during hunting season and the boat hunters of Unit 4 succeed best when deer are driven down to low elevations or the beaches, especially along Peril Strait. In the analysis of the 1996 season, it was mentioned that, "The 1996 deer hunting season was characterized by an almost total lack of snow at low elevations throughout much of Southeast. That allowed deer to remain dispersed, at high elevations, and harder for hunters to find. Besides helping many deer evade hunters, the snow free early winter probably resulted in a higher than usual overwinter survival in some areas" and..."Pellet group counts done in spring 1997 after the hunting season indicate deer populations in most of Southeast are relatively stable or even increasing, with only about 25% of the drainages showing declines from when they were last surveyed. This leads to the conclusion that weather, not low deer numbers was responsible for low hunter success in

most of Southeast during the 1996 season." Fall and winter 2002 also was wetter than normal based on Juneau monthly weather summaries.

Results by Game Management Unit

GMU 1A (Revillagigedo and Gravina islands, Cleveland Peninsula, and Misty Fjords mainland) – An estimated total unit harvest of 251 deer was almost 32% lower than last year and substantially below the long-term average of 535 for the unit. The overall hunter success rate for GMU 1A was only 33%, considerably below the regional average of 58%. The Gravina Island harvest of 50 deer is lower than last year and fewer than half of the long-term average of 134 for the island. The number of hunters decreased from 248 to 178 while reported hunter success rate on Gravina declined slightly to 24%, and hunters spent 7.8 days afield for every deer taken compared to 7 days in 2001.

There was no reported deer harvest on the Cleveland Peninsula this year, the seventh consecutive year of very low harvest for the area. The number of hunter days decreased by 32% during this period. Mainland harvest in Misty Fjords is estimated at 7 deer, slightly lower than the long-term average of 12.

The number of hunters using Revillagigedo (Revilla) Island declined to 409 from 482 in 2001. However, hunter days increased by 7%, and the hunter success rate increased to 37%, but the harvest declined by 14% to 193. That total is 94 deer less than the average for the previous 10 years. Revilla hunters spent 8.1 days afield for every deer taken, compared to 6.5 days in 2001 Although the reported success by those hunters using highway vehicles decreased from 2001 (68 days afield per deer in 2002 compared to 16 the previous year), highway hunters took only 3% of Revilla's deer harvest. ATV users fared better harvesting a deer every 4 days afield. Altogether, 7% of Revilla's deer harvest came from road-based hunting, boat hunters took 85% of the deer harvest, spending 6.9 days afield per deer.

GMU 2 (Prince of Wales and neighboring islands) – Unit wide, the harvest for GMU 2 was 2169 deer, down from 2865 last year. Harvest on Prince of Wales (POW) in 2002 is estimated at 2,028 deer, 16% lower than the long-term average and about 569 deer fewer than 2001. Reported harvest of 73 does is lower than the previous season and 27% lower than the long-term average of 99. The number of hunters (1,815) on POW was 7% (92) fewer than the previous year. The success rate decreased slightly to 59% and hunters averaged 5 days in the field per deer, slightly more than in 2001. Those using highway vehicles or ATVs as their main mode of transport once again took 74% of the harvest in GMU 2 compared to 33% for the entire region. Hunter days on POW totaled 10,328, decreasing for the second time in the past 3 years and lower than the long-term average.

Craig hunter numbers are lower but other POW communities are close to last year. And reported Ketchikan hunter numbers are a few higher on POW than last year. Ketchikan hunters spent 450 more days afield than 2001. Reported days hunted dropped significantly for nearly all POW communities. Coffman Cove was down 650, Craig was down about 1200, Klawock almost 300, Thorne Bay 200, and Naukati 90. It is reasonable to conclude that the decline in hunter success (Ketchikan hunters got fewer deer despite more days per hunter) is due to the possibility that even though road access was good, too little snow let the deer remain so dispersed and at such high elevations that hunters couldn't find them easily.

A total of 127 fewer people from all Prince of Wales Island communities reported hunting in 2002 compared to 2001. POW hunters that hunted in 2002 had a worse success rate than 2001. The number of deer taken by Craig hunters declined, and the number of Craig hunters in the field, deer per hunter (1.3) and days per deer (3.8) also declined from the previous year. Thorne Bay hunters spent fewer days afield for slightly more deer per hunter (1.7) than in 2001. Slightly fewer Klawock hunters reported fewer deer harvested in 2001, so deer per hunter decreased from 1.7 in 2001 to .7 in 2002.

Elsewhere in Unit 2, on Heceta Island, 52 deer were reported taken, reversing the trend of declining harvest begun in 1999. Hunter success declined on Heceta with 47% of hunters reporting a kill while spending 3.6 days afield for each deer taken. Harvest also declined sharply on Suemez Island where about 5 deer were taken, which is 86% lower than the previous 10-year average. Dall and Long island hunters reported 11 deer taken, an 88% decrease over 2001, but the number of hunters declined as well, from 42 hunters in 2001 to 12 hunters in 2002. On the "Outer" islands (including Noyes, Baker, and Lulu) the 2002 numbers remained similar to 2001 with number of deer per hunter and days per deer about the same. There were 11 fewer hunters on the Outer islands, but they were more successful per hunter, taking 33 deer in 2002 compared to 36 in 2001. On Kosciusko, the number of hunters was down, but the success rate improved, 40 hunters taking 18 deer compared to 52 hunters taking 10 deer in 2001.

GMU 1B and 3 (central mainland and islands) – Deer harvest on the central mainland (GMU 1B) is 34 in 2002, a decline of 9 deer from 2001. However the number of hunters declined by 50, leading to a slightly higher success rate of 9.7 days/deer vs. 12.5 in 2001. The GMU 3 harvest of 624 deer is down 229 from the 2001 season. Hunter participation was also down in GMU 3; the days per deer increased to 7.4 from 6.3 in 2001 and the average deer per hunter also dropped slightly.

In Unit 3, the Zarembo Island harvest of 277 is slightly lower than the 10 year average of 299. The Wrangell Island harvest of 29 declined 62% from 2001 and was down sharply from the record high of 102 two years ago. Harvest on Mitkof Island (64) declined 41% from 2001 and is 57% less than the long-term average for the island. The harvest on Kupreanof Island of 149 dropped 8% from 2001 levels, despite a similar amount of hunter effort. The percent of the harvest in GMU 3 that came from hunters using highway vehicles or ATVs as their main mode of transport declined from 2001 to 47%, the lowest in 5 years.

GMU 1C (northern mainland, Douglas, Shelter, and Lincoln islands) – Unit wide, harvest was down slightly from last year, 358 deer compared to 380 last year. Estimated harvest on Douglas Island was 288 deer, an increase of 24% from 2001 and 25 deer lower than the long-term average. Percentage of bucks in the harvest was 60%, decreasing for the first time in four years. The estimated number of hunters decreased by 15 (666) from 2001, but hunter days increased over 2001 totals to 2,160 (9% increase). Because of its proximity to Juneau and having road access to about half the island, Douglas is consistently the most heavily hunted island per square mile in Southeast Alaska. In 2002 it ranked fifth in number of reported hunter days per island behind the much larger islands Prince of Wales, Chichagof, Admiralty, and Baranof. Douglas' hunter success rate of 27% moved up from second lowest success rate in 2001 to seventh lowest in 2002. Douglas hunters spent 7.5 days afield for each deer harvested, 1.5 fewer than 2001. The percentage of the harvest on Douglas by hunters using highway vehicles as their main mode of transport increased to 75%, exceeding the previous high of 70% in 1998.

Harvest on Shelter and Lincoln islands decreased 33% to 60 deer from the previous season, which is 18% below the long-term average. This reduction in harvest can be explained by the reduction in number of hunters, 111 this year compared to 159 last year (36% decrease.) Percentage of does taken from those islands increased from the previous year to 42% of the harvest.

Ten deer are estimated to have been taken on the mainland near Juneau, which is just under the long term average of 12.

GMU 4 (Admiralty, Baranof, Chichagof and neighboring islands) – Estimated harvest was down 31% for the unit compared to the 2001 season. Admiralty Island harvest was 3% lower than the 2001 season, Baranof Island harvest was 52% lower, and Chichagof/Yakobi islands 10% lower. The Kruzof Island harvest of 317 was almost identical to last year (318). The estimated Baranof Island harvest of 1,223 deer was nearly 1,000 deer lower than the previous 10 years average.

Sitka hunters reported about 1,178 fewer deer harvested in 2002 (a 41% decrease) with a total reported harvest of 1,701 deer. On Admiralty Island the 2002 estimated harvest of 1,382 deer was down 38% from the previous year and was 691 deer lower than the previous 10-year average, as well as being the lowest since 1989.

Outlook - Although the number of deer hunters, hunter success rates, and the total number of deer harvested is down from the previous year, much of this change appears to be related to weather conditions during the 2002-03 hunting season. In years of normal snowfall, deer are pushed to lower elevations and even out onto beaches, greatly increasing their vulnerability to hunters. The winter of 2002-03 was a near record low for total snowfall and there were very few snowfall events that would force deer to lower elevations. Experienced hunters appear to have recognized these conditions, and as a consequence it appears that fewer hunters attempted to hunt and their success rate was lower because animals never became concentration in accessible areas. It is very unlikely that the region-wide decline in harvest reflects a decline in the overall deer population. It is much more likely that the mild winter weather will actually result is greater winter survival of deer and an increase in deer numbers for the next season. This may have resulted in reduced harvest for this year, but make the prospects for future years even better.